**Programme Specification ARO 034a**

This specification provides a concise summary of the main features of the programme and of the learning outcomes that a typical student might reasonably be expected to achieve if they take full advantage of the learning opportunities provided.

*This document is published on the University website and will be the publicly available record of the named programme.* The information contained in this form should be included in the Programme Handbook, either as presented below or in a format determined by the Faculty.

*Please use the Programme Specification Guidance Form to help you complete this form.*

### Section 1 Key Facts

<table>
<thead>
<tr>
<th>Awarding Body</th>
<th>University of Stirling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partner Institution</td>
<td></td>
</tr>
<tr>
<td>Programme Name</td>
<td>PG Cert Aquaculture Health Studies</td>
</tr>
<tr>
<td>Award</td>
<td>PG Cert</td>
</tr>
<tr>
<td>Lead Faculty</td>
<td>Natural Sciences</td>
</tr>
<tr>
<td>Division</td>
<td>Aquaculture</td>
</tr>
<tr>
<td>UCAS Code (UG only)</td>
<td></td>
</tr>
<tr>
<td>Programme Code</td>
<td></td>
</tr>
<tr>
<td>Mode of Study</td>
<td>Full Time ☒ Part Time</td>
</tr>
<tr>
<td>Location(s) &amp; Method(s) of Study</td>
<td>On Campus – UK ☒ International ☐ Where:</td>
</tr>
<tr>
<td></td>
<td>Online ☐ Blended ☐</td>
</tr>
<tr>
<td>Admission Points</td>
<td>September ☐ January ☒ Other:</td>
</tr>
<tr>
<td>Length of Programme</td>
<td>12 weeks</td>
</tr>
<tr>
<td><strong>SCQF Level</strong></td>
<td>11</td>
</tr>
<tr>
<td>Total Credit Value</td>
<td>60</td>
</tr>
<tr>
<td>ECTS Credit Value</td>
<td>30</td>
</tr>
<tr>
<td>Relevant QAA Subject Benchmark</td>
<td></td>
</tr>
<tr>
<td>Professional Body Accreditation (all relevant)</td>
<td>Name of accrediting body: Required for programme to be offered ☐</td>
</tr>
</tbody>
</table>
Section 2 Overview

PROGRAMME SUMMARY

Programme Aims
The programme is aimed at postgraduate level students working, or intending to work in the global aquaculture industry. It is specifically designed to train students in the wide range of disciplines apposite to investigation, prevention and control of disease in the marine and freshwater environment.

Key Features of the Programme
This programme has a unique focus on aquatic animal health and is taught by globally acknowledged experts in the field. It features flexible learning opportunities through which students can acquire and further develop the knowledge and skills necessary to establish, manage and appraise disease and health management of aquaculture enterprises.

WHAT WILL I BE EXPECTED TO ACHIEVE?
On successful completion of this programme, you should be able to:

1. Identify the causes, mechanisms and tissue and cellular consequences of disease in fish and other aquatic animals
2. Identify and understand the life cycles and treatment of the main parasitic, bacterial and viral diseases of cultured aquatic animals
3. Appreciate the fish immune system and the use of immunodiagnostics in aquatic animal disease management.
4. Utilise epidemiological methods to assist in the management of aquatic animal diseases
5. Apply toxicological knowledge and methods to fish pathology

On successful completion of this programme you will have developed the following graduate attributes:

1. A range of practical skills in aquaculture health management
2. Independent and critical thinking with respect to aquaculture disease diagnosis and treatment
3. Awareness of the latest technologies and procedures in relation to aquaculture disease issues

HOW WILL I LEARN?

Teaching and Learning

This is a relatively intensive course with a high content of face-to-face teaching through lectures, practical labs and supported group work and discussions. Students are generally expected to be in attendance between 09:30 and 16:30 each weekday. In addition to class and lab teaching, there are some field visits to industry or for the purpose of sampling. The teaching is mostly carried out by Institute of Aquaculture academic staff who are all active researchers with their own areas of expertise. Throughout the year a number of external lecturers are also invited from other research institutes or to give industry experience.
and perspectives.

Significant use is made of group exercises as these help with the development of collaboration and cooperation skills as well as providing a more supportive environment for all learners. Group work is often problem-based helping you to develop analytical and problem-solving skills as well as communication skills particularly in presentation of solutions.

Very important support for learning is also provided through our virtual learning environment – Canvas – which allows presentation and supporting materials to be made available online. This includes recordings of lectures and access to other video or audio resources. It also provides a variety of collaboration and course management tools to ensure everyone can participate effectively even when far from campus.

**WHAT TYPES OF ASSESSMENT AND FEEDBACK CAN I EXPECT?**

**Assessment and Assessment Criteria**
Each module in the programme is assessed individually with no final examination.

You will be assessed by a diversity of methods which include:
- coursework based on field, library or laboratory research, which has substantially longer deadlines than examinations for completion. Some elements of the coursework are based on individual assignments whilst others are group based with either individual or group assessments.
- short written or practical examinations completed within a restricted timeframe

Throughout the programme a range of assessment methods are used including short answer or multiple choice examinations and class quizzes, online tests and exercises, extended essays, practical reports, oral presentations, seminar performance. All work is marked by academics but an element of peer and external feedback is included in some modules.

**Feedback on Assessment**
The University takes feedback very seriously and, along with the Students’ Union, have developed a Feedback Policy and Student Guidance on Feedback. Feedback and feedforward can be both informal and formal, and can be provided individually and in groups. It can take many different forms depending a module’s requirements and may be provided in the following ways across the programme:

**Participating in and reflecting on:**
- discussions in class about assignments or presentations;
- a practice marking session or commenting on a sample assignment;
- 'drop-in' advice at feedback & guidance sessions;
- discussions in supervision meetings;
- 'clicker' responses in a lecture;
- a debriefing by a professional practitioner or mentor.

**Reviewing and reflecting on:**
- electronic, written or audio feedback through Canvas;
- verbal or written comments from staff or other students;
- assignment exemplars;
- practice assignments or past exam papers;
- plagiarism similarity reports;
- entries in learning journals on academic/professional experiences;
• ratings on a marking rubric;
• 'generic' feedback to a class on how an exam question was tackled;
• final marks or awards;
• reactions to a presentation;
• comparative performance against peers.

What you should do with your feedback:
You are responsible for:
• familiarising yourself with module information on how to approach assessments and how, when and where to find your feedback
• accessing and digesting your feedback
• seeking further help and guidance from your tutors and other students
• saving a copy of your feedback for future use
• reflecting on your feedback to celebrate and build on your strengths and to use what you have learnt in your approach to work in the future
• offering constructive and supportive feedback to other students when asked to do so
• using what you have learnt from your feedback in future assessments

When you will receive feedback:
Formal feedback on assessments is expected to be given within 3 working weeks. Our learning management system, Canvas, will be used in the electronic submission, marking and feedback dissemination of coursework.

Further information on feedback can be found here:

Assessment Regulations
If you would like to know more about the way in which assessment works at the University of Stirling, please see the full version of the assessment regulations at:
Undergraduate
Postgraduate – Taught
Postgraduate - Research

WHAT WILL I STUDY?
Outline Programme Structure

This programme consists of three compulsory modules, listed below. More information about these requirements can be found in the relevant Module Descriptors. The options available each year can be subject to change due to student demand and availability of teaching staff.

Year 1

Total year 1 credit value = 60
Compulsory credits = 60
Option credits = 0

Compulsory Modules

<table>
<thead>
<tr>
<th>Module Name</th>
<th>Module Code</th>
<th>Credit</th>
<th>Semester</th>
<th>SCQF Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYSTEMIC PATHOLOGY AND HISTOPATHOLOGY</td>
<td>AQUPGW1</td>
<td>20</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>AQUACULTURE DISEASE TREATMENT</td>
<td>AQUPGW2</td>
<td>20</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>AQUACULTURE HEALTH CONTROL</td>
<td>AQUPGW3</td>
<td>20</td>
<td>2</td>
<td>11</td>
</tr>
</tbody>
</table>
READING LIST

Key Readings for the Programme

There are no specific recommended texts for this programme and a continuously updated list of important and relevant materials is provided within each module. The following publications are an example of the types of material which are suggested for the programme:

- I C Shaw and J Chadwick (1998) Principles of Environmental Toxicology. Taylor & Francis

Section 3 Student Support

SUPPORT FOR STUDENT LEARNING

Induction
As this programme starts in January rather than September, induction activities are limited and focus on essential information to participate in the programme. You will be studying alongside students who are already familiar with the University and able to guide you in general matters. The staff will also be available to support your transition into the programme.

Study Skills Support
Student Learning Services (SLS) are committed to providing comprehensive guidance on all aspects of effective and efficient learning. The ultimate aim of the service is to enable you to make the most of your academic studies at the University and for you to become an independent, successful learner during your time at the University of Stirling. This is facilitated through collaborative work with experienced tutors and by offering a variety of courses, workshops and tutorials.

All students, whatever stage of their academic studies, are welcome to use Student Learning Services. However the service may be particularly beneficial:

- In your first two years of study.
- If you are making the transition from college to Higher Education.
- If you have been out of education for some time.

What SLS are able to do:

- Advise you on academic skills relevant to your studies at University.
- Help you consolidate your previous learning and develop new learning strategies.
- Advise on action-plans to potentially improve grades.
- Suggest practical solutions if you feel overwhelmed by assignment work.
• Help you gain confidence in the transition to Higher Education.

More information can be found here: https://www.stir.ac.uk/student-life/support-wellbeing/student-learning-services/

STEER
STEER is a University-wide peer support scheme linking in returning student "Captains" with new undergraduate or taught post-graduate "Crew" during their first year at Stirling.

The scheme aims to help you make the most of your time at the University, help new students - the Crew - settle in and realise the opportunities available to them. You can find out more information here: https://www.stirlingstudentsunion.com/representation/studentsupport/steer/

Stirling Graduate School
For Postgraduate Research Students the Stirling Graduate School as well as your own faculty will provide support. More information can be found here: https://www.stir.ac.uk/research/research-degrees/stirling-graduate-school/

Academic and Pastoral Support
Adviser of Studies: Advisers have an important role to play in enhancing your academic and personal development and are essential to ensuring you make the most of your time at university. Advisers provide a personalised point of contact for you to discuss academic concerns or queries within the academic community. The general purpose of the role is to provide more in-depth advice on the academic options available to you and on the academic policies and regulations within the University. More information can be found here: https://www.stir.ac.uk/about/faculties-and-services/academic-registry/adviser-of-studies-scheme/

Personal Tutor: The role of a personal tutor is to help you feel part of the University community. They are a specific and consistent source of guidance, information and support for you throughout your studies. The tutor should be the your first formal point of contact for general academic guidance and pastoral support. More information can be found here: https://www.stir.ac.uk/about/faculties-and-services/academic-registry/personal-tutor-scheme/

Support and Wellbeing: At university you may face non-academic issues where you need some expert help or guidance. There are lots of ways we can help you in your day-to-day life at University. Student Support Services provide a range of high-quality services to assist you during the course of your studies, help prepare you for life after graduation. We aim to enhance the student experience and help you to get the most out of your time at University. More information can be found here: https://www.stir.ac.uk/student-life/support-wellbeing/student-support-services/emotional-wellbeing/

Students’ Union: You can also access additional support through the Students’ Union, more information can be found here: https://www.stirlingstudentsunion.com/representation/studentsupport/

Accessibility and Inclusion (A&I)
A&I are committed to offering a service which is welcoming and supportive of the needs of all students. Our service takes into account the full range of needs you may have, in a wide variety of circumstances including - physical and mobility difficulties, sensory impairments, specific learning difficulties including dyslexia and autistic spectrum disorder as well as medical conditions and mental health difficulties. The Timetabling, Exams and Graduation team can also support you if you have short-term, temporary impairments or other difficulties as a result of an accident, injury, illness or surgery and can be contacted here TEG@stir.ac.uk . More information can be found here: https://www.stir.ac.uk/student-life/support-wellbeing/student-support-services/accessibility-and-inclusion/
METHODS FOR EVALUATING AND IMPROVING THE QUALITY AND STANDARDS OF TEACHING AND LEARNING

Module Evaluation
Module evaluations are carried out each year and are an important way of getting student feedback on the modules we teach. We aim to evaluate every module we teach in every semester. You can find out more here: [https://www.stir.ac.uk/about/faculties-and-services/academic-registry/student-information/module-evaluation/](https://www.stir.ac.uk/about/faculties-and-services/academic-registry/student-information/module-evaluation/)

Programme Review
Programmes are reviewed annually and on a 5 yearly cycle. You can get involved in a variety of different ways; by completing module evaluations, becoming a course representative and attending Student Staff Consultative Committees, or participating in the review process itself. You can find out more here: [https://www.stir.ac.uk/about/faculties-and-services/academic-registry/academic-policy-and-practice/quality-handbook/review-and-monitoring/](https://www.stir.ac.uk/about/faculties-and-services/academic-registry/academic-policy-and-practice/quality-handbook/review-and-monitoring/)

External Examiner(s)
Name of External Examiner: 
Institution:

Section 5 My Future

WHAT KIND OF CAREER MIGHT I GO ON TO?

What career avenues does this qualification open up to the student?

The course is aimed at individuals who wish to pursue a career related to aquaculture and aquatic health management, whether directly in production, or the wider value chain, or through scientific research and technological development or sectoral management, through commercial, non-profit or government organisations. With its international outlook, the course aims to prepare you for work in any part of the world.

This programme facilitates development of the following graduate attributes

Connected

- The programme will connect you with aquaculture and aquatic health knowledge, understanding and skills as applied to complex real-world issues and processes.
- The programme will connect you with private, public and third sector representatives via external teaching contributions, collaborative project opportunities and employer-engagement events.
- The programme will connect you with knowledge, experiences and people providing different perspectives on aquatic production and health, via diverse student and staff population, and international examples embedded in our teaching.
- The programme will allow you to work with staff, students and external organisations as part of an inclusive learning community.
- The programme will teach you to communicate effectively through a range of digital and other media.

Innovative

- The programme allows you to innovate through participation in active and ethical, world-leading research.
- The programmes uses the latest global research and new technologies to develop new understandings and creative solutions to aquaculture problems and opportunities.
• The programme will train you in independent critical and reflective thinking aquaculture and aquatic health issues.
• The programme will teach you to identify opportunities for improvement in your own learning and to take action.

**Transformative**

• The programme can transform your intellectual passion and excellence with regards to aquaculture systems and aquatic disease issues and solutions.
• The programme can help you share new perspectives and broaden your horizons via interaction with industry as well as in-class discussions with fellow students from across the globe.
• The programme provides training in professionalism, allowing you to develop as an adaptable and resilient individual, equipped to succeed in the global aquaculture jobs market.
• The programme allows you to develop as an active global citizen who is socially, culturally and environmentally aware.

**WHAT STUDY ABROAD OPPORTUNITIES ARE AVAILABLE?**

This short programme is not part of a formal study abroad scheme.

**WHAT PLACEMENT OPPORTUNITIES ARE AVAILABLE?**

This short programme is not structured to enable placement opportunities.

**WHAT FURTHER STUDY OPTIONS ARE AVAILABLE TO ME?**

This programme does not in itself lead to further study opportunities.

**WHAT OTHER INFORMATION DO I NEED TO KNOW?**
### HOW DO I ENTER THE PROGRAMME?

**Admissions Criteria**

Students will require a 2.2 or better honours degree in Veterinary Medicine or broadly relevant biological subject. For this programme, relevant work experience is also taken into consideration and may be equally important. For non-native English speakers, IELTS of 6.0 with 5.5 minimum in each skill are required.