



One Health: Ecosystems, humans health and food

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Course aims

The aim of the One Health Course is to provide graduates with the knowledge and skills to work in a One Health framework that recognises the importance of interdisciplinary working and the interrelatedness of human, animal and environmental health.

The main programme aims are to enable students to:

- Understand emerging disease patterns and dynamics
- Acquire knowledge about One Health and reduce negative effects of interactions between animal, human and ecosystem health.
- Understand how a One Health approach can be applied in a range of practical situations.
- Apply One Health principles to address and manage emerging disease threats.
- Identify gaps or challenges in implementing One Health surveillance programmes at the national, regional and global level.
- Interpret and communicate the results of relevant research.

The educational outcomes of the programme are:

- To enhance knowledge and understanding of One Health from a global perspective in order to enable effective multi-sectoral participation in this complex interdisciplinary field.
- To enhance knowledge and skills relating to the emerging diseases of human.
- To assess, assimilate and apply scientific evidence, that may be limited or incomplete, to real life situations, and develop appropriate, timely and adaptable responses and solutions to One Health challenges.
- To provide a first-class learning experience that will enable graduates to continue independent continuing professional development throughout their careers.

Methodology

The One Health Course is designed to combine the e-learning and the on-site learning.

The frontal lessons consist of combining lectures, and discussions

The e-learning lessons consist of monthly assignments of peer-reviewed papers, quizzes and on-line discussions

During the frontal part, One Health concepts and approaches are presented and discussed, e.g. disease pattern and surveillance, source identification, risk assessment, prevention and control models and experiences from the course participants' own countries are included when possible.

Case-study topics may include interaction between medicine, food and environment.

The case-studies may be facilitated by experts within a range of topics of relevance for One Health.

The course participants are expected to be present and actively contribute to the course topics and presentations that constitute part of the evaluation of the students. The course will be concluded with a written examination.

Course Description

One Health sits at the interface between human, animal and ecosystem health. As such, it is a fast-evolving subject area, well suited to preparing professionals looking to tackle the wide range of intractable and highly complex health challenges of the 21st Century. The One Health approach seeks to improve the health and wellbeing for humans, animals and the environment through innovative, cross-sectorial, and systematic development. One Health not only implies involvement of different sciences, but is also an approach which encourages coordination, communication, data and information sharing and joint efforts between the involved parties.

Recommended Texts

One Health- Integrated Approach to 21st Century Challenges to Health 1st Edition - Editors: Joana Prata, Ana Ribeiro, Teresa Rocha-Santos

Introduction to One Health: An Interdisciplinary Approach to Planetary Health [Sharon L. Deem, Kelly E. Lane-deGraaf, Elizabeth A. Rayhel](#)