



**PLANETARY
HEALTH**
DOCTORAL PROGRAMME

25
26

RISK ANALYSIS APPLIED TO ONE HEALTH

OPTIONAL CURRICULAR UNIT



5 DAYS ► 11 SESSIONS

02.02 - 06.02.2026

Faculdade de Medicina Veterinária
Avenida da Universidade Técnica, Lisboa

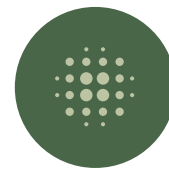
AL4ANIMALS

ASSOCIATE LABORATORY FOR
ANIMAL AND VETERINARY SCIENCE

[Registration form](#)

Download, fill in and send the form to:
geral.al4animals@fmv.ulisboa.pt

RISK ANALYSIS APPLIED TO ONE HEALTH



INTRODUCTION

Master Risk Analysis for Real-World Health Challenges. The "Risk Analysis applied to One Health" optional curricular unit offers specialized training that is invaluable not only for those in the Planetary Health PhD program but also for doctoral candidates across diverse fields, including public health, veterinary medicine, environmental science, epidemiology, and even policy studies.

This unit focuses on **equipping you with the practical methodologies and critical thinking** necessary to conduct robust risk assessments within the complex Human-Animal-Environment interfaces. You will delve into the core concepts of risk analysis, comparing various established approaches (such as NASS-NRC, Covello-Merkhofer and Codex Alimentarius WOH), and mastering both qualitative and quantitative assessment methods, including dose-response models and Monte Carlo techniques. A key component of this unit is **hands-on training in the R programming language** – a powerful tool widely used by risk analysts in professional settings – enabling you to develop a marketable skill that is highly valued in the job market.

The learning environment is designed to foster active participation and multidisciplinary collaboration, mirroring the integrated approach central to the "One Health" paradigm. With a strong emphasis on practical application (71% of total working hours), you will work in groups, under the direct guidance of experienced teachers, to develop and present your own risk assessments. **This unit provides a unique opportunity:**

- to deepen your scientific background in risk analysis,
- refine your problem-solving capabilities
- enhance your ability to communicate uncertainty and variability in scientific contexts.

Become adept at a crucial skill set that directly addresses disease prevention and management within the interconnected world of One Health.

IMPORTANT NOTES

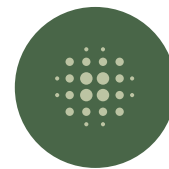


- The UCO will be taught in English;
- Classes are held in person at FMV-ULisboa;
- The UCO, with continuous assessment, award a certificate of completion;
- The maximum number of students per UCO is 20.

[Registration form](#)

Download, fill in and send the form to:
geral.al4animals@fmv.ulisboa.pt

RISK ANALYSIS APPLIED TO ONE HEALTH



SESSION 1

February 2, 9h00-11h00

INTRODUCTION. JOB MARKET FOR RISK ANALYSTS.

SESSION 2

February 2, 11h00-13h00

RISK ANALYSIS CONCEPTS.

Comparison of various approaches and systems (NASS-NRC, Covello-Merkhofer, Codex Alimentarius, WOAHA).

SESSION 3

February 2, 14h00-16h00

QUALITATIVE VERSUS QUANTITATIVE METHODS OF RISK ASSESSMENT (RA)

SESSION 4

February 2, 16h00-18h00

TRAINING IN THE R ENVIRONMENT AND PROGRAMMING LANGUAGE.

SESSION 5

February 3, 9h00-11h00

UNCERTAINTY AND VARIABILITY.

Deterministic and stochastic models.

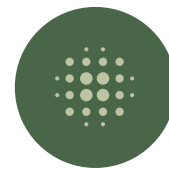
SESSION 6

February 3, 11h00-13h00

PROBABILITY DISTRIBUTIONS.

Dose-response models.

RISK ANALYSIS APPLIED TO ONE HEALTH



SESSION 7

February 3, 14h00-18h00

SUPERVISED DEVELOPMENT OF THE AR BY DIFFERENT GROUPS OF STUDENTS, WITH IN-PERSON SUPPORT.

SESSION 8

February 4, 14h00-16h00

RISK COMMUNICATION. RISK MANAGEMENT.

SESSION 9

February 4, 16h00-18h00

SUPERVISED DEVELOPMENT OF THE AR BY DIFFERENT GROUPS OF STUDENTS, WITH IN-PERSON SUPPORT.

SESSION 10

February 5, 14h00-18h00

SUPERVISED DEVELOPMENT OF THE AR BY DIFFERENT GROUPS OF STUDENTS, WITH IN-PERSON SUPPORT.

SESSION 11

February 6, 9h00-13h00

PRESENTATION OF THE AR BY THE GROUPS OF STUDENTS, FOLLOWED BY COLLECTIVE DISCUSSION.