



LAS-Learning

Course Organisers Instructions

EU Module 26 - Inspector

Development of interactive e-learning modules on specific areas of the Education & Training framework facilitating implementation of DIR 2010/63/EU

Contract n. ° 09200200.A092004/2021/862589/SER/ENV.B2

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05/03/2025

v2.0 Second document version

Supported by:



Partners:

ONESOURCE
Consultoría Informática Lda.





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1. Module Description

a. Overview

This module, *Inspector*, aligns with the endorsed EU guidance document on Inspections and Enforcement, covering the EU Education and Training (E&T) Framework Learning Outcomes (LOs) tailored for Inspectors. It targets individuals employed by competent authorities tasked with conducting inspections as outlined in Article 34 of Directive 2010/63/EU to ensure proper inspection procedures are followed. Additionally, the module may benefit a broader audience, including members of Animal Welfare Bodies, by aiding in reviewing internal operational processes to proactively identify issues as part of internal quality control procedures and for internal follow-up of formal Competent Authority inspections. While the intended audience is expected to understand animal care and use in scientific procedures and the relevant legislation, inspectors' varied backgrounds should be considered. This document provides guidance and suggestions to support the course organiser's efforts. Each module is aligned with the learning outcomes outlined in the EU Education & Training framework for laboratory animal science.

We recommend consulting the EC Training and Education framework [guidance document](#) if you access the site independently. This resource offers an overview of training requirements for individuals with different responsibilities under their relevant national legislation.

Further reading and additional education and training may be necessary to meet national or institutional training requirements. At the end of each module, you will find a list of recommended further readings and references cited throughout the content. Links to these references are provided whenever possible.

This module was developed by Ana Isabel Santos and Javier Guillén, two renowned experts with extensive experience in laboratory animal science, mainly focusing on laboratory animal welfare, ethics, and regulatory compliance. Their work spans research, publications, and training in these fields. The module was further revised by an international Reflection Group panel, with coordination led by Nuno H. Franco.

The module is currently in the testing phase. We appreciate your collaboration in integrating it into your courses and providing feedback. After completing a module, please fill out the form below with your feedback.

b. Learning Objectives

This module will equip participants with essential knowledge and skills to navigate animal research's ethical, legal, and practical aspects. The key learning objectives include:

2. General Principles.
3. Preparing the inspection.
4. During the inspection.
5. After the inspection.



6. Course Program

The module is organised into different chapters, with lessons and learning objectives for the participants as follows:

Chapter	Lesson	Learning objectives
Introduction	1	Get to know the learning objectives
General Principles	2-9	Types and Benefits of Inspections, tested with a quiz and a case study Inspector's Profile and Skills, tested with a quiz and a case study Evaluating Culture of Care, tested with a quiz
Preparing the inspection	10-18	Ethics & the Three Rs, tested with a quiz Procedures and Exceptions Authorisation of Establishments, and Personnel Roles and Responsibilities, tested with a quiz Legal and Associated Aspects for the Inspection Process Evaluation, Authorisation and Reporting of Projects, tested with a quiz Types of Establishments According to Animal Use
During the inspection	19-28	Inspector's Approach and Effectiveness of Inspections, tested with a quiz Housing, Husbandry and Management Conditions (A) Housing, Husbandry and Management Conditions (B) Animal Welfare and Severity Assessment, tested with a quiz Rehoming, Reuse, Humane Killing, and Management of Surplus Animals Evaluating Training and Competence of Personnel, tested with a quiz Evaluating Compliance and Implementation of the Three Rs in the Authorised Projects
After the inspection	29	Managing the Outcome of the Inspection
Summary and knowledge check	30-32	Module summary List of references and further reading Assess your knowledge

Table 1 - Learning objectives per parts and lessons.

a. Progress Tracking

Once learners begin working through a module, their progress is automatically tracked. This allows them to pause and resume their studies at any point. Upon completing the module, learners retain access to all sections, enabling them to revisit and review specific topics to reinforce their understanding.



b. Model Structure and Implementation Guidance

The module is structured into several parts, which were designed to be followed in sequence but can also be taken iteratively based on the learner's needs. Please note that a **certificate of completion** is issued exclusively to learners who finish all parts of the module.

If proof of completion for a specific part is required, trainees can provide a screenshot of their progress, as the module tracks and displays the completion status after each part. This allows for flexibility while maintaining accountability for partial or full completion.

From a pedagogical perspective, each tutor is responsible for deciding which materials to use in face-to-face sessions, which parts learners should complete independently, and whether to mandate their completion. However, it is essential to consider the time required to complete the eModule or its parts to avoid overburdening learners.

We highly recommend completing the module to ensure it aligns with your course's content and scope. Familiarising yourself with the material will also enable you to engage more effectively with students on the various topics covered in the eModule.

c. In-Depth Explanation Lesson by Lesson

Lesson	Title	LO	Explanation
1	Introduction		Image and tagline.
2	Different views on animal experimentation within the society and their consequences	2.1	Image and a short introduction. Flip cards with relevant images and short details. Link to two initiatives. Image with highlights about conditional acceptance of animal experiments.
3	The role of the scientist in the public discourse	2.1	Image and a short introduction. Video about the role of the scientist in the public discourse.
4	Ethical theories shape public opinion and legislation	2.2 2.3	Image and a short introduction. Steps to introduce Animal Ethics. Knowledge check question.
5	Ethical and animal welfare issues in your own work	2.2 2.3	Image and a short introduction. Design of experiments flip cards. Performance of procedures and handling flip cards. Monitoring and mitigating measures flip cards. Culture of Care introduction and image.
6	Relevant EU legislation	2.5 2.6 2.7 2.8 2.9 2.10	Image and a short introduction. Collapsible with details about the Advancement of alternatives and high level of animal protection, the Principle of replacement, reduction and refinement and the Choice of methods.
7	The harm-benefit analysis - an	2.5 2.6	Image and a short introduction.



	essential part of the project evaluation	2.7 2.8 2.9 2.10	Collapsible with details about Article 36: Project authorisation, Article 37: Application for project authorisation and Article 38: Project evaluation. Description and image of the harm-benefit analysis. How to perform an HBA image and description. Assessment of the benefits is split into 3 tabs. Knowledge check question.
8	Animal welfare, harm and severity	2.5 2.6 2.7 2.8 2.9 2.10	Image and a short introduction. The Five Freedoms is split into 3 tabs. Image with highlights about The Five Freedoms Description of Other Animal Welfare concepts with multiple illustrative images. Harm and suffering description. Terms definitions are split into 4 tabs with videos and images to illustrate each term. Limits to suffering in animal research, description and image. Severity classification description and Severity categories are split into 4 tabs with images. Recitals and articles are presented in collapsible form. Re-use of animal description and legislation in collapsible. Knowledge check question.
9	The Three Rs	2.5 2.6 2.7 2.8 2.9 2.10	Image, a short introduction and illustrative diagrams and figures. Replacement of animal experiments is presented in 2 tabs with images. The reduction of animal experiments is presented in one tab with images. Refinement of animal experiments description and image. Refinement methods are presented in 4 tabs with images. Relevant articles are presented in collapsible. Interactive scenario.
10	Good Scientific Practice	2.11	Optimising the use of animals in research is presented in a 4-step process with images, videos, figures and illustrative diagrams.
11	Animal welfare and scientific outcomes	2.11	Good moral and ethical reasons to safeguard animal welfare are represented with an image and 2 short quizzes. Effects of analgesia and untreated pain presented in 1 short quiz
12	The Culture of Care	2.11	Description of Culture of Care is presented in a 5-step process illustrated with figures. The Animal Welfare Body is represented with images and a collapsible for the DIRECTIVE 2010/63/EU, Articles 26-27 (AWB).



			Challenging situations that one could encounter in animal research are represented with an interactive scenario.
13	Dedicated journals and organisations	2.13 2.14	Examples of sources of information are represented with figures and logos.
14	Search tools and methods	2.13 2.14	Description and examples of dedicated databases illustrated with one image. Description of Systematic reviews and meta-analyses presented in tabs with diagrams, 1 video and 1 multiple choice quiz.
15	Long-term trust in scientific research from the general public	2.4	Trust and acceptance are presented in a 3-step process.
16	Summary		Module summary
17	References and Further Reading		References for additional materials
18	Knowledge-check		Assesses progress and knowledge acquired during the module

Table 2 - Explanation lesson by lesson.



7. Participants' Profile

This module is aimed at the persons working for competent authorities carrying out inspections under Article 34 of Directive 2010/63/EU to ensure the inspections are appropriately performed.

While the target audience is expected to understand the care and use of animals in scientific procedures and the legislation covering such use, the likely diverse background of inspectors should be considered, and adequate training and references have been made available to bridge eventual gaps.



8.eModule

The eModule provides clear definitions, essential knowledge, and interactive components designed to enhance understanding of key animal ethics theories and develop critical thinking skills. Participants will learn to ethically frame and evaluate animal research from a broad perspective and a case-by-case approach.

The content and references are curated from expert sources, including researchers and information specialists, ensuring high-quality and reliable information. The module is presented dynamically, combining text, images, built-in exercises, and videos to engage learners effectively. It can be integrated into courses as homework or used during a lecture day. Many lessons are designed to deliver comprehensive information and understanding without additional in-class interaction.

a. Limitations

While the module on inspectors' roles in animal care and use in scientific procedures provides valuable knowledge and practical skills, future iterations can be improved to better support inspectors in their critical roles, ensuring high animal welfare standards and compliance with ethical research practices.

Searching for alternatives, including assessing (the quality of) the search, reporting, and documentation, is not easy. It requires several tools, practice, and often team efforts to be achieved appropriately. Therefore, not every tool or method could be explained in detail within this eModule. However, references and further reading suggestions open vast possibilities for interested users to learn more about this topic.

b. Blended Learning Approach

E-learning modules offer significant advantages, particularly for learners who may find it challenging to attend traditional intensive training sessions spanning several days. Such sessions can disrupt work schedules and limit participants' ability to balance learning with other responsibilities. While this eModule covers all required learning outcomes, we do not advocate entirely replacing face-to-face teaching (or "live" online discussion sessions) with e-learning. Instead, we recommend a blended learning approach (hybrid or mixed-mode learning). This approach combines the flexibility of e-learning with the engagement of interactive, live sessions, ensuring that learners receive the necessary information while accommodating those who require greater flexibility.

The modules are split into short, manageable lessons, allowing participants to seamlessly integrate learning activities into their daily schedules.



9. Implementing Blended Learning Strategies

Flipped Classroom Arrangement

Before face-to-face classes, learners are introduced to the course contents (for example, by completing our e-learning modules). You can recommend that learners take the whole course (and request a certificate of completion) or focus on specific lessons or chapters.

This approach can:

- Familiarise learners with the content in advance, helping them better understand complex concepts.
- Prepare and motivate learners to engage more actively in their learning and during face-to-face classes.
- Harmonise learners' knowledge levels before in-person classes.
- Provide sufficient background knowledge for group work, allowing for more focused and productive discussions.
- Provide a starting point for interactive discussion.

Consolidate Learning and Prepare for Exams

The courses are designed to align with the learning outcomes of traditional laboratory animal science courses. Learners can use each module to study and prepare for the final exam. Additionally, the built-in quizzes allow learners to test their knowledge and track their progress.

Address Expertise Gaps in Your Facility

Gathering expertise across all subjects covered in the EU-functions modules can be challenging, especially in smaller establishments. This may hinder the ability to deliver training that meets all outcomes of the Education and Training framework to a high standard. Using these modules as a basis, tutors and learners can access quality reference material that could mitigate such gaps and ensure education and training are up to standard.

Use Modules as Teaching Resources

Tutors can integrate text, videos, images, interactive exercises, and quizzes into their teaching activities. This not only boosts engagement but also caters to different learning styles. For each module, we provide suggestions for topics that can be incorporated into interactive discussion sessions.



10. Textbooks and Reading Materials

The “**References and Further Reading**” lesson provides most references and readings. They comprise scientific articles, sections of books, websites, and videos. Clicking on any link will open a new window to download or visualise the additional material. Several links to further resources can also be found in the module contents to better guide the reader.

The additional materials provide more information on specific topics, tools, and resources. They are ideal for learners who wish to expand their knowledge or gain a more comprehensive understanding of the issues.



11. Notes

We are committed to constantly improving our modules to ensure they effectively meet our users' needs. Your valuable insights and suggestions are vital to testing the modules to achieve this goal.

a. Course Organisers' Feedback Form

We highly value your input as a course organiser. Please take a few moments to complete the form linked below. Your feedback will provide invaluable insights to help us refine and improve our modules, ensuring they meet your needs and those of your learners.

https://forms.uu.nl/universiteitutrecht/TestReview_LASlearning_CO

b. Course Participants' Feedback Form

As you deliver the courses to your participants, please share the link below with them. This will allow us to gather their perspectives and insights, helping us enhance the learning experience for future users.

https://forms.uu.nl/universiteitutrecht/TestReview_LASlearning_CO

c. Instructions Feedback Form

We would greatly appreciate your valuable insights and detailed feedback regarding the instructions provided. Your input will help us ensure clarity, accuracy, and overall effectiveness in conveying the necessary information.

https://forms.uu.nl/universiteitutrecht/TestReview_LASLearning_instructions