

Education and Training Platform for Laboratory Animal Science

The role of ETPLAS, course modules, DOPs and SOPs NORECOPA 18th anniversary - October 14th 2025

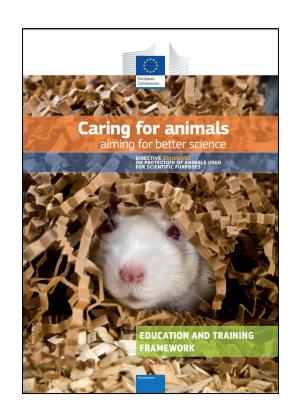
INSTITUTO
DE INVESTIGAÇÃO
E INOVAÇÃO
EM SAÚDE
UNIVERSIDADE
DO PORTO

Nuno Henrique Franco ETPLAS Past-President (2023-2025)

The Education & Training Platform for Laboratory Animal Science



A European platform at which information on education and training can be exchanged is proposed.





Education and Training Platform



for Laboratory Animal Science

About ETLAS



• Established in 2014

The EU one-stop-shop for E&T in lab animal science, information sharing and communication; registered in Spain (Spring 2021)

Pools together key stakeholders

Member State Authorities Course Providers Course Accreditors

To provide:

- Information and tools for the delivery and assessment of high quality laboratory animal science training in Europe
- A forum for exchanging information on LAS education and training

To facilitate

- Mutual recognition of education & training in Laboratory Animal Science (LAS)
- The free movement of personnel

About ETPLAS



- Should not add bureaucracy or control approval/accrediting processes
- ETPLAS goal is to facilitate and inform (European Commission, 2014) e.g. by publishing list of available courses formally recognized by Competent Authorities, or Accrediting Bodies
- Establishing and harmonizing standards for E&T in LAS (e.g. defining learning outcomes, publishing DOPS forms, etc.)
- Not originally defined by the European Commission (but EC endorsed):
 - e-learning courses
 - ETPLAS exam platform
 - Resource library (for 3rd party content)

ETPLAS has moved to Brussels, Belgium





Headquarters back to a European Union Member State

ETPLAS Website



- Website www.etplas.eu
 the LAS E&T central platform
- E-learning Modular training
 Free, +12.000 registered users
- Directly Observed Practical Skills Forms
- European LAS course directory
- Exam platform
- Outputs from EU-funded projects
- Guidance and Recommendation documents for LAS Education & Training



EDUCATION &
TRAINING
PLATFORM FOR
LABORATORY
ANIMAL SCIENCE

ETPLAS is a non-profit
European organization
dedicated to raising and
harmonizing education &
training standards in
Laboratory Animal Science.







EDUCATION & TRAINING PLATFORM FOR LABORATORY ANIMAL SCIENCE







EU module 20. Anaesthesia for minor procedures

Objective: To assess the trainee's ability to perform practical anaesthesia-related skills correctly, ensuring animal welfare.

Instructions for trainees: You will be observed performing various anaesthesia-related tasks. A competence assessor will evaluate your performance according to the criteria below.

Trainee:	Assessor:			
Species:	Date:			
Method(s)/technique(s): (e.g., set-up of anaesthetic equipment, sedation, pre-anaesthetic evaluation)				

Assessment details: Each criterion is rated from (-) to (+++), and a global rate is given at the end.

Criteria	Descriptors		Rating	scale	
		(encir	cle the c	orrect of	otion)
Selection and	Selects simple anaesthetic methods appropriate for the species,	-	+	++	+++
justification of	procedure, and duration. Justifies choice with emphasis on animal				
techniques	welfare, and scientific needs.				
Pre-anaesthetic	Performs basic health checks to identify contraindications,	-	+	++	+++
evaluation	focusing on species and physiological parameters relevant for				
	short-term anaesthesia.				
Set-up and	Sets up and correctly operates simple anaesthetic equipment (e.g.,	-	+	++	+++
maintenance of	injection volumes, chambers, masks).				
anaesthetic					
equipment					
Anaesthesia	Administers anaesthetic via basic methods (e.g., IP injection,	-	+	++	***
induction	chamber induction) effectively, ensuring smooth and minimal				
	distress.				
Monitoring	Observes reflexes, respiration, and basic physiological parameters	-	+	++	+++
techniques	to assess anaesthetic depth. Adjusts as needed for stability.				
Management	Recognises and addresses minor complications (e.g., shallow	-	+	++	+++
of adverse	anaesthesia or mild distress) promptly and appropriately.				
events					
Post-	Ensures smooth post-anaesthetic recovery using simple	-	+	++	+++
anaesthetic	interventions (e.g., warmth, hydration). Monitors for any				
recovery	immediate complications.				
Record keeping	Maintains clear, concise records of anaesthetic protocols, reflex	-	+	++	+++
	monitoring, and recovery notes for each procedure.				
Safe handling	Adheres to safety protocols for handling small quantities of	-	+	++	+++
and disposal of	anaesthetic agents, ensuring proper disposal.				
anaesthetic					
agents					
agents					\sqcup



Example situation:

- [+]: Completes pre-anaesthetic evaluation but shows hesitation in setting up equipment, needing minor guidance.
- [++]: Appropriately monitors anaesthesia depth during a procedure with occasional hesitancy in assessing reflexes
- [+++]: Confidently selects and administers anaesthesia, maintains optimal depth with proactive adjustments, and smoothly oversees post-anaesthetic recovery.

Global rate (EU module 20): This section provides an overall rating of your expertise and supervision level based on performance in the criteria above.

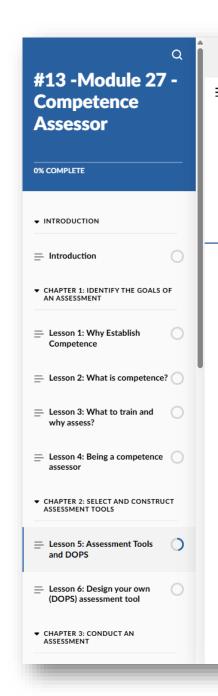
PRACTICAL COMPETENCE & LEVEL OF SUPERVISION

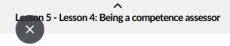
☐ Novice (-): Performs with caution	☐ Intermediate (+, ++): Performs	☐ Competent (+++):
but requires further training.	most tasks with minimal guidance.	Independently manages
Requires hands-on supervision.	Requires hands-off supervision.	anaesthesia for minor
		procedures with confidence
		and skills. Can work
		independently without
		supervision.
Observations/feedback: The assessor r section helps track progress and identif		d areas for improvement. This
Signed:		



TRAINEE

ASSESSOR







Lesson 6 of 17

Lesson 5: Assessment Tools and DOPS

Learning outcomes of this lesson

- Describe the application of Direct Observation of Procedural Skills (DOPS) sheets, how they relate to other assessment strategies, how to use them, and how they contribute to the overall assessment quality.
- Explain how different approaches to assessment influence their quality criteria and what possible assessment strategies are available.
- 9 Name essential elements of competent performance within an entrusted professional activity.

Different methodologies and the relation to DOPS to assess competence

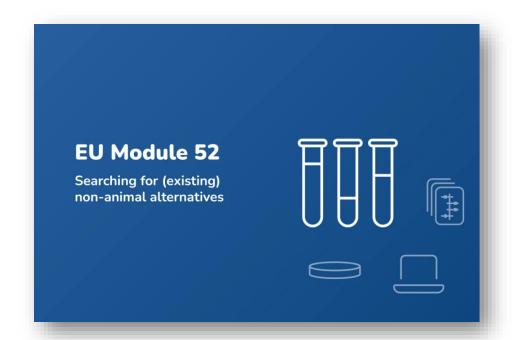
Several methodologies evaluate different components of competence. However, knowledge, skills, and attitude should all be integral to practical assessment. Other tools focus on several aspects of competency and can be used in training, assessment, and

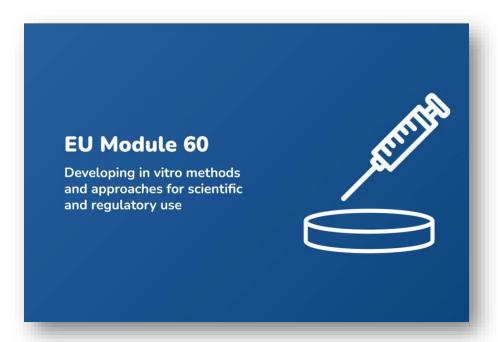


Replacement

EU-52: Searching for (existing) non-animal alternatives

EU-60: Developing non-animal alternatives for regulatory use

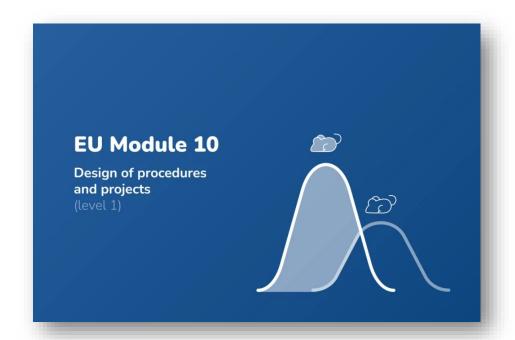


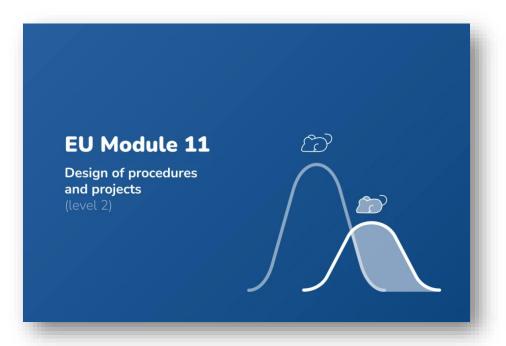




Reduction

EU-10: Design of procedures and projects – level 1 EU-11: Design of procedures and projects – level 2







Refinement (from a regulatory perspective)

EU-12: The Severity Assessment Framework

EU-25: Project evaluation

EU-26: Inspector

EU-27: Competence Assessor





Refinement (from an animal welfare perspective)

EU-5: Recognition of pain, suffering, and distress (species-specific)



Mouse



Rat



Zebrafish



EU Module 5

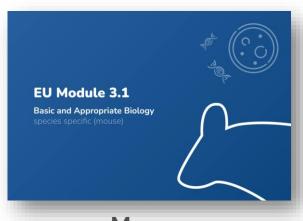
Recognition of pain, suffering and distress species specific (pigs)



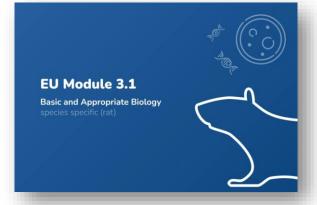


Other topics

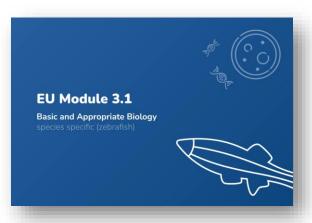
EU-3.1: Basic and appropriate biology (species specific)



Mouse



Rat

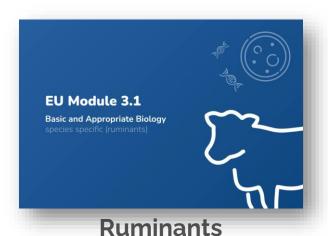


Zebrafish



EU Module 3.1

Basic and Appropriate Biology species specific (pigs)



Other topics

EU-2: Ethics, Animal Welfare and the Three Rs - Level 1

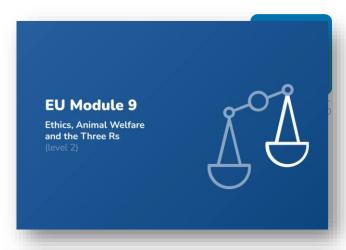
EU-9: Ethics, Animal Welfaer and the Three Rs - Level 2

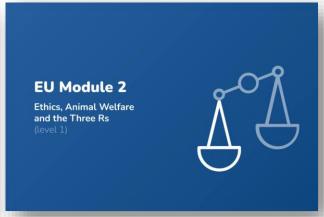
EU-24: Designated Veterinarian

Systematic Review of Animal Studies

Preregistration of Animal Studies











Advantages



- Easy access
- Flexible attendance (great for professionals with limited time)
- Wide range of topics and species
- Follows learning outcomes for EU-function modules
- High quality
- Reduced cost (free, for now)
- Soon to be translated to multiple languages

Caveats



- Cannot replace face-to-face teaching (or at least it should not, IMHO)
- No way of asking questions to asynchronous e-learning platforms
- The system can be "rigged" by rushing through pages without actually reading
- Educational contents delivered in a system with ample opportunities for distraction (social media, Youtube, email...)
- Accessibility issues

Recommended teaching/learning approach

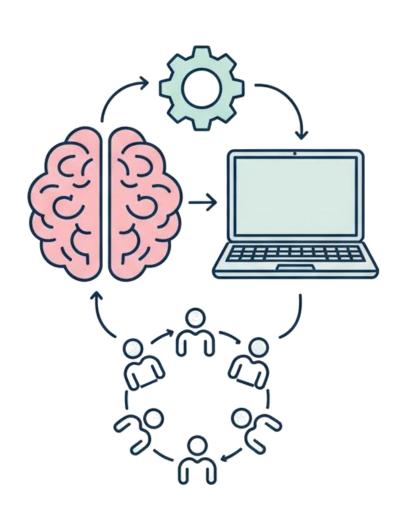


Blended Learning

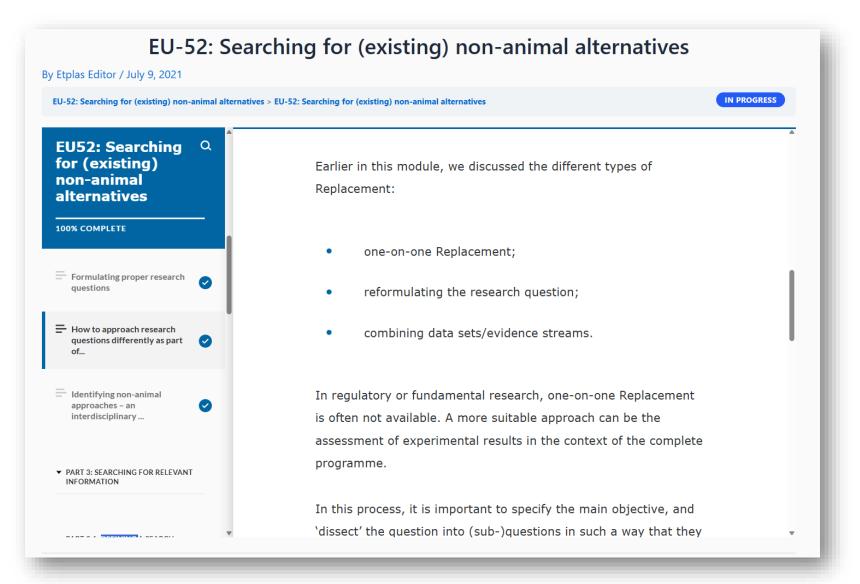
Combines the flexibility of e-learning with the engagement of interactive, live sessions

Ensures that learners receive the necessary information while accommodating those who require greater flexibility.

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







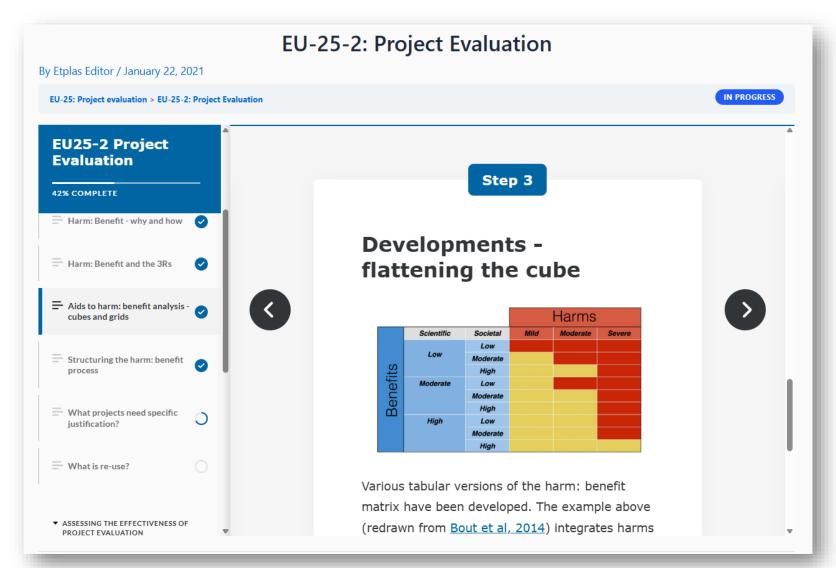
- Ask learners to take the module "Searching for (existing) no animal alternatives, at home
- Face-to-face, organize them in groups and ask each to find available Replacements to animal tests., e.g.:
 - Pyrogenicity
 - Draize
 - Phototoxicity





- Your MSc student is validating a new application for an existing NAM
- Ask them to take the module "Developing in vitro methods and approaches for scientific and regulatory use"
- Using it as a starting point, discuss what was learned, what can and cannot be applied in their work, and what limitations exist.





- For the training of newly recruited Animal Welfare Body members, you organize them in groups, and give each a simple project application to appraise.
- You ask them to do EU-25 module, and afterwards to appraise the same project, minding all relevant aspects.
- In the next session, hold a debate to discuss any changes.





- A group of postdocs with licenses for procedures in rodents, are being trained to work with pigs.
- Ask them to take module 3.1 –
 Basic and Applied Biology, and to
 ask groups to deliver talks on its
 contents to their colleagues:
 - Anatomy and physiology
 - Husbandry, Welfare, and procedures
 - Housing and environmental enrichment
 - Dietary requirements
 - Breeds

Acknowledgements





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- ETPLAS Pilot Project Grant
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- LAS-Learning Project





Happy to take your questions

