



University of Minho
School of Medicine

LABORATORY ANIMAL SCIENCE

March 1-19, 2027 ::: 22nd Edition

Week 1

Day	Start	End	Theme
01/03/2027	08:30	09:00	LAS Course Opening
	09:00	10:00	History of animal use, ethics and the 3Rs - Part I
	10:15	11:30	History of animal use, ethics and the 3Rs - Part II
	11:45	13:00	A case of unethical treatment of laboratory animals (video and discussion)
	15:00	16:30	Basic biology of rodents
	16:30	17:30	Group tasks (introduction)
02/03/2027	08:45	10:00	Human health hazards and safe practices in the animal facilities
	10:15	11:45	Breeding and management of genetically altered animals
	12:00	13:30	Handling and restraint (theory)
	14:30	16:30	Project preparation / self-study
	16:30	19:00	Handling and restraint (practical 1) - Class A
	16:30	19:00	Project preparation / self-study - Class B
03/03/2027	08:45	10:15	National Legislation
	10:30	11:45	National and international legal issues
	12:00	13:30	Husbandry routines and animal welfare
	14:30	16:30	Project preparation / self-study
	16:30	19:00	Project preparation / self-study - Class A
	16:30	19:00	Handling and restraint (practical 1) - Class B
04/03/2027	08:45	10:15	Good welfare - Good Science: the influence of husbandry and care on experimental outcome
	10:30	11:45	Refinement of experimental procedures
	12:00	13:30	Minimally invasive procedures - identification and administration of substances (theory)
	14:30	16:30	Project preparation / self-study
	16:30	19:00	Minimally invasive procedures: identification and administration of substances (practical 2) - Class A
	16:30	19:00	Project preparation / self-study - Class B
05/03/2027	08:30	10:00	Principles and techniques of Surgery and Microsurgery
	10:15	11:45	Anaesthesia for minor procedures in rodents
	12:00	13:30	Recognition of pain, suffering and distress
	14:30	16:30	Project preparation / self-study
	16:30	19:00	Project preparation / self-study - Class A
	16:30	19:00	Minimally invasive procedures: identification and administration of substances (practical 2) - Class B

Week 2

Day	Start	End	Theme
08/03/2027	08:30	10:00	GLP and the ARRIVE guidelines
	10:00	12:00	Project preparation / self-study
	14:00	16:00	Ethics, animal welfare and the 3Rs (level 2)
	16:15	17:15	Welfare assessment
	17:30	19:00	Harm-benefit analysis, severity classification and culture of care
09/03/2027	08:30	10:00	Minimally invasive procedures - sampling of biological fluids and tissues and suture (theory)
	10:15	11:45	Health monitoring and diseases of lab animals
	12:00	13:30	Health status and animal facility barriers
	14:30	16:30	Project preparation / self-study
	16:30	19:00	Humane methods of killing - Class A
	16:30	19:00	Project preparation / self-study - Class B
10/03/2027	08:30	10:30	Design of procedures and projects (level 1) - part I
	10:45	12:30	Design of procedures and projects (level 1) - part II
	14:30	16:30	Project preparation / self-study
	16:30	19:00	Project preparation / self-study - Class A
	16:30	19:00	Humane methods of killing - Class B
11/03/2027	09:00	11:30	Study design and Statistics
	14:30	16:30	Project preparation / self-study
	16:30	19:30	Minimally invasive procedures: sampling (practical 3) - Class A
	16:30	19:30	Project preparation / self-study - Class B
12/03/2027	08:30	10:00	Implementing the 3Rs and using alternatives
	10:30	11:30	Colony management and genetic drifting
	12:00	13:30	Animal facilities Manual and local AWB
	14:30	16:30	Project preparation / self-study
	16:30	19:30	Project preparation / self-study - Class A
	16:30	19:30	Minimally invasive procedures: sampling (practical 3) - Class B

Week 3

Day	Start	End	Theme
15/03/2027	08:30	10:00	Visit to the Central Animal Facility and Skills assessment - Group A1
16/03/2027	08:30	10:00	Visit to the Central Animal Facility and Skills assessment - Group A2
	10:00	12:00	Project preparation / self-study
	13:00	14:30	Suture (practical 4) - Class A
	13:00	14:30	Project preparation / self-study - Class B
	14:30	16:30	Project preparation / self-study
	16:30	18:00	Visit to the Central Animal Facility and Skills assessment - Group A3

Week 3 (cont.)

Day	Start	End	Theme
17/03/2027	08:30	10:00	Visit to the Central Animal Facility and Skills assessment - Group B1
	10:00	12:00	Project preparation / self-study
	13:00	14:30	Project preparation / self-study - Class A
	13:00	14:30	Suture (practical 4) - Class B
	14:30	16:30	Project preparation / self-study
	16:30	18:00	Visit to the Central Animal Facility and Skills assessment - Group B2
18/03/2027	08:30	10:00	Visit to the Central Animal Facility and Skills assessment - Group B3
	10:00	12:00	Project preparation / self-study
	13:30	17:30	Project presentation and discussion
	17:30	18:00	Course ending session
19/03/2027	09:00	12:00	Self-study
	16:30	18:30	Examination