Theoretical:

Swedish legislation & ethics, animal welfare and 3R (cost 300 kr)

This course provides basic knowledge about the legislation regarding research with animals in Sweden.

The intending learning outcomes is that the participant should be able to:

- interpret and practice the Swedish legal requirements regarding the use of animals for scientific purposes.
- know and apply the principles of the 3R:s, animal welfare and ethical argumentation concerning research animals.

Practical:

<u>Laboratory animal science Function C+D- Rodents (cost 600 kr)</u>

This course provides knowledge about how to handle, take care and euthanize rodents.

The intending learning outcomes is that the participant will:

- know and apply basic species-specific biology and physiology of the research animals covered in the course (EU Module 3.1, EU Module 3.2 is practical skills)
- know and apply the fundamental principles of research animal housing, enrichment, care and health monitoring (EU Module 4)
- know and interpret healthy animal behaviour and recognise pain, suffering and distress; describe pain assessment and the possibility of objective pain scoring, together with basic principles of analgesia and anaesthesia (EU Module 5)
- know and apply the fundamental principles of euthanasia, differentiate between end-points, describe different methods of euthanasia and how they apply to different types of animals and life stages (EU Module 6.1 - EU Module 6.2 is practical skills)
- Laboratory animal science Function A- Rodents (cost 300 kr)

This course gives you the theory behind performing procedures. The contents correspond to the EU recommended learning objectives for persons performing procedures (EU Function A). Previous modules have already given your insight into animal welfare, ethics, 3R and euthanasia that are highly relevant when performing procedures and in the choice of methods.

The intending learning outcomes is that the participant will:

- Understand how the most common procedures are performed
- Know what is important to keep in mind when performing different procedures
- Understand how a procedure can go wrong and that this can mean for the animal
- Laboratory animal science- Fish (cost 900 kr)

This course is focused on fish as research animals. The course gives theoretical knowledge how to take care of , handle and perform procedures on fish.

The intending learning outcomes is that the participant will:

relate basic biology and physiology of the research animals covered in the course (EU Module 3.1, EU Module 3.2 is practical skills, se link below) to practical tasks with animals in research.

- compare and use relevant fundamental principles of research animal housing, enrichment, care and health monitoring (EU Module 4) to practical tasks with animals in research.
- interpret healthy animal behaviour and recognise pain, suffering and distress; describe pain assessment and the possibility of objective pain scoring, together with basic principles of analgesia and anaesthesia (EU Module 5).
- apply the fundamental principles of basic procedures and euthanasia, differentiate between end-points, describe different methods of euthanasia and how they apply to different types of animals and life stages (EU Module 6.1 - EU Module 6.2 is practical skills).

Laboratory Animal Science- Fish survey techniques (cost 900 kr)

The purpose of this course is to provide information necessary for carrying out fish surveys. By fish surveys, we mean studies that involve the capture, counting, measuring, weighing and killing of fish (or returning the fish to the water). If you are going to do more with the fish, such as marking fish or taking tissue samples on live fish for genetic analysis, you will also need to complete the module "Laboratory Animal Science – Fish". This course should be combined with the course about the sampling techniques that you will use in your research (multi-mesh gillnets, electrofishing, trawling and hydroacoustic, other methods).

The intending learning outcomes is that the participant after the course should be able to:

- Have basic knowledge on fish taxonomy.
- Describe the differences between the groups (taxa) that usually are simply called "fishes".
- Give a general description of the Swedish fishing law and ordinance, and also other relevant laws.
- Describe the legislation concerning research on threatened species and bycatches.
- Describe the legislation concerning the use of animals caught in the wild in scientific research, for doing research in the wild and for fish monitoring.

<u>Laboratory animal science- Birds (cost 900 kr)</u>

This course provides knowledge about how to handle, take care, euthanize and perform procedures on birds.

The intending learning outcomes is that the participant will be able to:

- Describe the basic anatomy and physiology of birds.
- Understand group-specific differences in anatomy and physiology and how this needs to be accounted for when using birds in research.
- Identify environmental factors that may affect the animal's wellbeing.
- Understand appropriate daily care-taking, and how to provide an appropriate environment during captivity or experimental situations.
- Understand how to capture, handle and restrain birds in an appropriate way for the selected procedures, without causing undue stress.
- Indicate how procedures may influence experimental outcome.
- Be familiar with different identification and marking methods used for wild or captive birds and how these can impact the animal's behaviour and/or wellbeing.

- Recognize different levels of pain, distress or health problems, and act to relieve the animal from suffering.

For any questions, please contact $\underline{till standshavarkansliet.mbw@su.se}$