

PEDAGOGICAL REVIEW – GUIDELINES AND PROCESS FOR THE USE OF LIVE ANIMALS IN TEACHING AND TRAINING

As per the CCAC policy statement on: pedagogical merit of live animal-based teaching and training (May 2016), CCAC certified institutions that conduct animal-based teaching or training must have a formal pedagogical merit review process. Animals used for educational purposes are not being used to discover, prove or develop new ideas or techniques, but rather to demonstrate principles and facts which are already well-known. In this situation, animals must only be used for teaching purposes when the educational goals of the course that rely on the use of animals cannot be conveyed in an alternative manner. This is evaluated by a review done by independent, expert peers to confirm pedagogical merit.

An animal use protocol (AUP) for every course involving live vertebrate animals must be submitted by the instructor or program coordinator to the Animal Care Committee (ACC) for approval. The instructor or program coordinator is required to obtain and submit an independent review of the pedagogical merit of animal use, a process which is described herein and overseen by a representative of the senior administration and facilitated by the ACC Coordinator. Animals may only be used once the activity is deemed to have pedagogical merit and the ACC has approved an Animal Use Protocol.

For each assessment of animal-based teaching and learning it is expected that the pedagogical merit review process consider several key aspects of the proposal:

- Whether the learning objectives are clear and specify the involvement of animals;
- Whether the learning objectives specify the proportion of the objective that must be achieved and/or how well the behaviour must be performed (accuracy, speed, quality);
- Whether the composition, learning level and needs of the student group(s) are compatible with the goals and objectives of the animal-based teaching/training;
- Whether the timing of the inclusion of animals in the teaching/training is suitable for the projected timing of the expected outcome(s);
- Any feedback from student assessments and course or session evaluations regarding the benefit of the animal-based teaching/training;
- Whether the review of the obstacles and opportunities for implementing Three Rs by the animal-based teaching/training instructors' is sufficiently thorough; and
- whether criteria proposed for assessing the completed animal-based teaching/training is suitable and will contribute to optimization of this use of animals for the benefit of future students.

Frequency of Pedagogical Merit Reviews:

The pedagogical merit review of the animal-based teaching and training should be done for every new teaching or training course, and reviewed at least every four years for ongoing teaching and training even if there are no changes to the course. Ongoing teaching and training can undergo a pedagogical merit review when a new protocol is submitted. The four-year interval gives institutions enough time to identify possible replacement alternatives

Pedagogical Merit Reviewer

To assure that the pedagogical merit review is at arm's length from the Instructor and the YukonU ACC, the following terms and conditions for peer reviewers are required:

- must be external to the course for which the protocol will be undertaken and must not be directly involved in the course design or implementation.
- must not **normally* sit on the animal care committee**
- should have appropriate experience in the relevant field, discipline, or sub-discipline to adequately review the proposal.
- Should have knowledge of pedagogy and replacement alternatives to animal-based teaching or training
- should not be in the any other potential or perceived conflict of interest (e.g. personal or financial)

**Knowledgeable animal care committee members may participate in pedagogical merit review as long as they recuse themselves from the ethical review of the same animal-based teaching or training project.*

Suitable Pedagogical Merit Reviewers (PMRs) will be determined by the office of the Associate Vice President Research. The reviewer's role will be to review animal-based teaching at the University for pedagogical merit at arm's length from the ACC and ensure that the 3Rs have been considered, particularly replacement alternatives. Proposals will only be approved for pedagogical merit when non-animal alternatives have been investigated and found to be inadequate to address the teaching goals. The PMR will advise the ACC that a teaching proposal involving animals has been deemed to have/not have pedagogical merit.

Pedagogical Merit Review Committee (PMRC) Composition

For each pedagogical review, the PMRC will consist of at least two independent referees with knowledge of pedagogy and alternatives to animal-based teaching and who do not sit on the ACC nor are involved with the proposed course. These reviewers may be any of the following:

1. Yukon University faculty members who are not currently members of the ACC, with experience in the use of animals in teaching; or

2. Yukon University faculty members who have not taught courses involving live animal use;
or
3. External animal care experts with experience in the use of animals in teaching; (e.g. veterinarians or RVTs involved in teaching/training at other academic institutions)

Process

The pedagogical merit review of live animal-based teaching and training will be undertaken for every new teaching or training course, and reviewed at least every four years for ongoing teaching or training, even if there are no changes to the course. Ongoing teaching or training will undergo a pedagogical merit review when a new protocol is submitted.

As per CCAC's guidelines:

1. the YukonU ACC Coordinator has been authorized by the AVPR to manage administrative aspects of the process and will work closely with the AVPR who is responsible for the pedagogical merit review.
2. YukonU has developed two review forms to facilitate the evaluation of the merits of the proposed use of animals in teaching.
 - a. Pedagogical Merit Information Form for course instructors or program coordinators to help reviewers perform their assessment.
 - b. Pedagogical Merit Review Form to guide reviewers in their evaluation of the course

Instructors should submit to the ACC Coordinator

- A copy of the completed Pedagogical Merit Information Form;
- A copy of the completed animal use protocol (AUP) along with accompanying documents pertaining to animal use: the proposed course's lab manual or course materials (if available) or related SOPs.

The ACC Coordinator will send the AUP and Pedagogical Merit form to 2 reviewers for Pedagogical Merit Review. Each Pedagogical Merit Reviewer will individually complete a Pedagogical Merit Review Form and will provide their conclusions on whether or not the proposed teaching has sufficient pedagogical merit for the use of animals. The reviewers' comments and recommendations will be documented and returned to the ACC Coordinator and to the instructor/course coordinator.

If the activity is deemed to have insufficient pedagogical merit, the activity will go no further.

If the activity is deemed to have pedagogical merit, the protocol and related documents will then be revised as necessary by the instructor/coordinator based on the reviewer's comments and

the following finalized documents resubmitted to the ACC Coordinator and then to the reviewers for final comments and conclusions:

- The revised & complete AUP and associated lab manual and/or course materials;
- The Pedagogical Merit Information Form;
- The PMRC comments and conclusions.

Reviewers will then send their final comments and conclusion to the AVPR (through the ACC Coordinator), if pedagogical merit is confirmed. The ACC Coordinator will then submit to the ACC

- The final protocol
- The reviewers' comments and conclusions

The ACC will then review the associated AUP and will have the final decision with regard to the ethical considerations for animal involvement in teaching and training protocols.

If based on the comments and conclusions of the reviewers, the AVPR decides that there is no pedagogical merit, the ACC should not undertake ethical review of the protocol.

As a component of the pedagogical merit review, surveys are distributed to course participants to receive feedback on the use of animals in the course. The aim of the survey is to facilitate the effective use of animals and course design. The surveys are distributed to instructors for student completion to be submitted to the ACC Coordinator. A summary of the survey results is provided to the instructor for information and will be taken into consideration during subsequent protocol and pedagogical merit reviews.

References and Acknowledgments

Canadian Council on Animal Care (CCAC) supporting documents

- [CCAC policy on Pedagogical merit of live animal-based teaching and training \(May, 2016\)](#)
- [CCAC FAQ on Pedagogical merit of live animal-based teaching and training \(July, 2020\)](#)
- [CCAC Pedagogical Merit Review Form for Instructors Template](#)
- [CCAC Pedagogical Merit Review Form for Reviewers Template](#)

This information has been adapted from St. Mary's University Pedagogical Merit Review of Animal Use Protocols for Teaching and Training. Policy 8-1022 (2020) and Queen's University Policy on Pedagogical Merit of Live Animal-Based Teaching and Training (Oct. 2020).