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| Logo  Description automatically generated | **Animal Care Committee**  **Pedagogical Merit Review Comment Form**  **Confidential** |

In accordance with the Canadian Council on Animal Care (CCAC) and the Mount Saint Vincent University/Saint Mary’s University Animal Care and Use Program, live-animal-based teaching / training must be peer reviewed for pedagogical merit.

“**The use of animals for educational purposes is markedly different in its objectives than the use of animals in research or testing. Animals used for educational purposes are not being used to discover, prove or develop new ideas or techniques, but rather to demonstrate principles which are already well-known or to learn manual skills and techniques. The repetitive use of animals in this manner should be based on sound ethical justification and proven educational objectives**.” CCAC Guidelines.

The goal of this review is to determine if the live animal model proposed by the instructor is the best learning model in support of clearly-articulated intended learning outcomes and their assessment; if the specific live animal-based learning outcomes are, in fact, essential for the students enrolled, given the composition of student groups, their learning level, and the timing of animal use in the proposed teaching/training activity in relation to the projected timing of the expected outcome; if there are any equivalent replacement models, either absolute (non-animal model such as a mannequin or computer model) or relative (such as eggs, cell cultures, tissues, or animals that current expert peer advice and interpretation of scientific evidence indicate have a significantly lower potential for pain perception, such as some invertebrates).

The Joint MSVU/SMU ACC gratefully acknowledges the work of the reviewer. This Comment form should be completed and returned according to official communication instructions. If it is not possible to complete the review as officially requested this should be communicated immediately.

For more information please see:

* [Pedagogical\_merit\_of\_live\_animal-based\_teaching.pdf (ccac.ca)](https://ccac.ca/Documents/Standards/Policies/Pedagogical_merit_of_live_animal-based_teaching.pdf)
* [CCAC frequently asked questions: Pedagogical merit of live animal-based teaching and training](https://ccac.ca/Documents/Standards/Policies/FAQ-Pedagogical_merit_of_live_animal-based_teaching.pdf)

**Please refer to the provided Animal Use Protocol and the Teaching Appendix to conduct the review.**

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| **PROTOCOL** | TITLE | Click or tap here to enter text. |
| PI/INSTRUCTOR | Click or tap here to enter text. |
| COURSE & CODE | Click or tap here to enter text. |
| **REVIEWER** | NAME | Click or tap here to enter text. |
| DEPARTMENT | Click or tap here to enter text. |
| EMAIL ADDRESS | Click or tap here to enter text. |

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| Potential Conflict of Interest. Please confirm that you are/have not: | **YES** | **No** |
| involved in any way with this course? |  |  |
| a personal friend or relative of the PI? |  |  |
| from the same Department or Program as the PI? |  |  |
| been a research supervisor or grad student of the PI within the past 6 years? |  |  |
| any other potential conflict of interest? |  |  |

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| Use this space to elaborate on the above, if needed:  Click or tap here to enter text.  I agree to handle all materials provided for review and my completed review in a confidential manner and, I will not disclose or discuss the content of my review or final decision except to submit my review and return any paperwork as officially requested. I understand that my **anonymous** responses on the following pages (only) may be provided to the PI/Instructor for feedback in the case it is found to have insufficient pedagogical merit. This signature page will not be provided. | | |
| **REVIEWER SIGNATURE:** | **DATE: Click or tap to enter a date.** |

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| LEARNING OUTCOMES  Learning Outcomes must be provided in order for a pedagogical review to be conducted.  According to the CCAC, they must be specific, measurable, attainable, realistic, and timely.  Learning outcomes are clearly communicated expectations of student achievement and should be listed in the course outline. They are not the over-arching statements of educational intent, or course aims/goals. They are not descriptions of the content to be covered in the course, or the objectives of the course. Learning outcomes state what the student should be able to do with the knowledge/skill gained, in order to demonstrate their learning of it, and are concrete and measurable. Thus, the achievement of each learning outcome is directly evaluated in a specific assessment activity. *CCAC Example: “At the end of the learning session, students will be able to perform the demonstrated technique of orotracheal intubation using an anesthetized rat model.”* | | |
| **Pedagogical Review Statement** | **Agree?** | **COMMENTS/CLARIFICATIONS on any NO answer:** |
| The learning outcomes are clearly described, and the involvement of animals is clearly specified in one or more, regarding a specific principle and/or a specific manual skill. | ☐ YES  ☐ NO | Click or tap here to enter text. |
| For manual skill(s), the learning outcome(s) specifies how well the learned behaviour must be performed (accuracy, speed, quality). | YES  NO  N/A | Click or tap here to enter text. |
| The learning outcome(s) is described and demonstrated to be realistically achievable, given knowledge and training level of students; teaching activity/activities proposed. | YES  NO | Click or tap here to enter text. |
| In your opinion, the animal-to-student ratio and the instructor-to-student ratio are each demonstrated to be appropriate to achieve the learning outcome(s). | YES  NO | Click or tap here to enter text. |
| This animal-based teaching/training activity articulated is demonstrated to be timely for the students in their program. | YES  NO | Click or tap here to enter text. |
| The benefit of involving animals in this course, at this point in time in the academic curriculum is clearly articulated and demonstrated. | YES  NO | Click or tap here to enter text. |
| **LEARNING ASSESSMENT METHODS**  **According to the CCAC, the method for assessing how students will be evaluated on the knowledge/skill acquisition involving animals, must be described and therefore must be provided for a pedagogical review. Learning assessment methods can include, for example, specific question(s) on a lab exam, a practical exam, a graded lab report, a specific essay assignment.** | | |
| **Pedagogical Review Statement** | **Agree?** | **COMMENTS/CLARIFICATIONS on any NO answer:** |
| It is clearly articulated in the assessment description that the knowledge/skill learned in the experience of the animal-based activity will be directly assessed. | YES  NO | Click or tap here to enter text. |
| The actual method used to assess the relevant learning outcome is clearly articulated. | YES  NO | Click or tap here to enter text. |
| If the animal(s) is/are also used during the assessment method (e.g., demonstration of a skill in a practical exam), it is clearly stated that live animals are involved in the assessment method. | YES  NO  N/A | Click or tap here to enter text. |
| **LEARNING ACTIVITIES**  **The proposed activity must be completely described in a protocol (which may include relevant SOPs), and could include observation, capture, restraint, anesthesia, dissection, tissue harvest, muscle preparation, etc.** | | |
| **Pedagogical Review Statement** | **Agree?** | **COMMENTS/CLARIFICATIONS on a NO answer:** |
| The animal-based learning (lab) activity is completely described in the submitted teaching protocol and any accompanying standard operating procedure (SOP). | YES  NO | Click or tap here to enter text. |
| **CONSTRUCTIVE CURRICULUM ALIGNMENT PARADIGM (Outcome/Assessment/Activity)** | | |
| Is there a clear, logical alignment between the learning outcome and its assessment, and both align with the activity?  Yes, therefore there is constructive curriculum alignment and potentially pedagogical merit of live animal-based teaching and/or training.  NO, there is insufficient alignment among the learning outcome, assessment, and activity. Elaborate if desired:  Click or tap here to enter text. | | |
| **REPLACEMENT ALTERNATIVES** | | |
| **Pedagogical Review Statement** | **Agree?** | **COMMENTS/CLARIFICATIONS on a NO answer:** |
| The instructor has articulated and demonstrated that reasonable efforts to identify replacement alternatives have been made; but that none are appropriate. | YES  NO | Click or tap here to enter text. |
| Based on your pedagogical review, are the live animals and their use, as described in the teaching protocol the best model in support of the expressed learning outcomes, or could equivalent absolute or relative replacement alternatives be used?  BEST MODEL  ALTERNATIVE | | |
| If you are comfortable commenting on a replacement alternative that would be more appropriate, elaborate:  **Absolute** (e.g., computer simulation, model):  Click or tap here to enter text.  **Relative** (e.g., lower sentient live vertebrate or cephalopod, tissue, eggs, invertebrate):  Click or tap here to enter text. | | |
| Please list any resources (if any) you consulted to do this review:  Click or tap here to enter text. | | |

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| **CONCLUSION OF PEDAGOGICAL REVIEW** |
| **Choose One:**  Overall, it has been demonstrated that the described live-animal activity has strong curricular alignment and is essential, using the proposed activity and animal model. Therefore, it has pedagogical merit as is.  AGREE.  Optional Additional Comments:  Click or tap here to enter text.  Overall, it has not been sufficiently demonstrated that the described live-animal activity has strong curricular alignment. It is not essential to use the proposed activity and animal model. Therefore, there is insufficient pedagogical merit as is.  AGREE.  Optional Additional Comments:  Click or tap here to enter text. |

***Acknowledgement****:* MSVU wishes to extend its appreciation to the Animal Care Committee at Saint Mary’s University a for permission to adapt their form for use by MSVU researchers